

Cabin Dimensions

Comparison of a potential Hyperloop Cabin to that of a LearJet 25D
A Rectangular vs. Circular Envelope

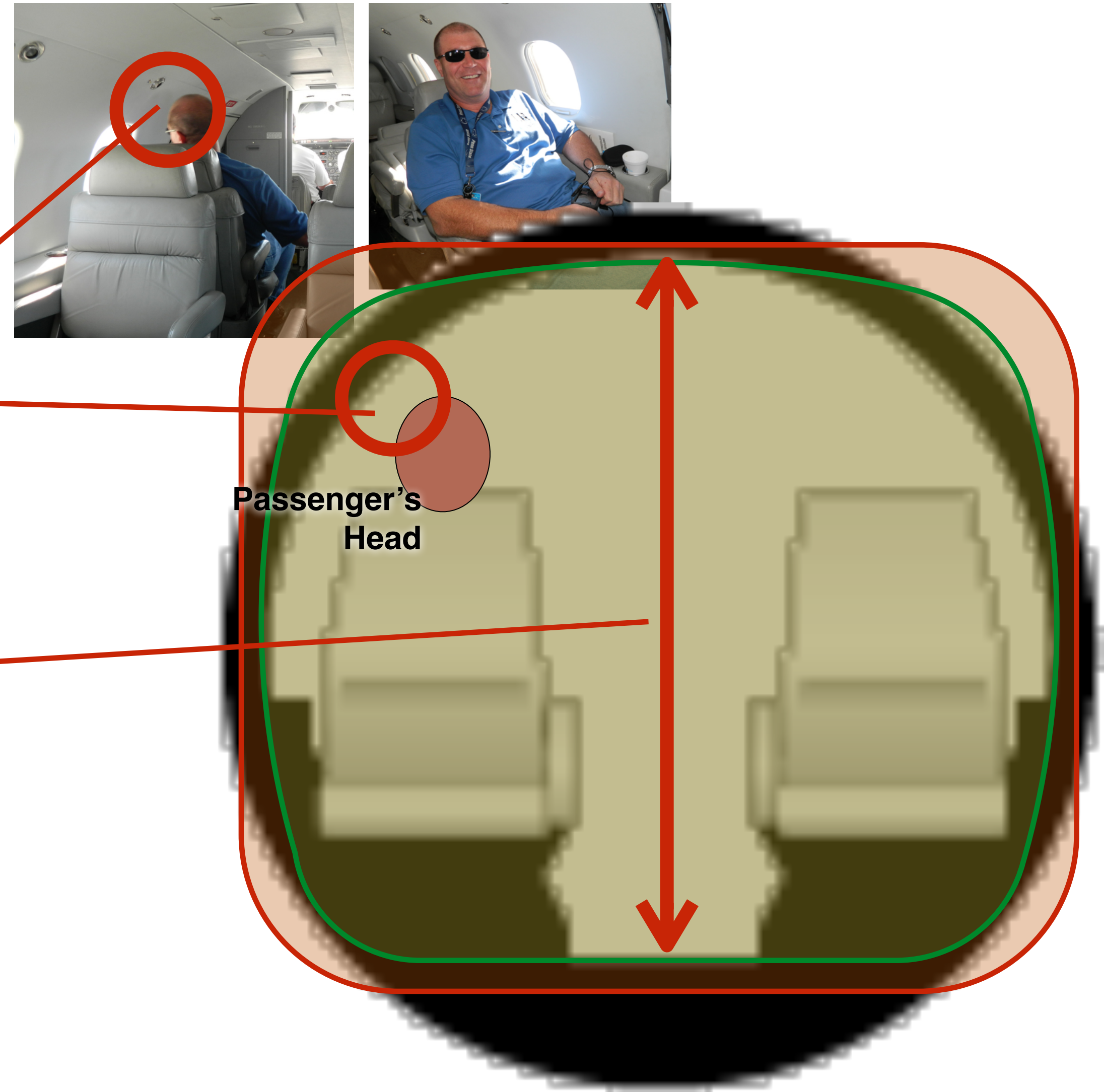
Learjet Model 25D

- Circular Fuselage 1.68m O.D.
- Headroom 1.31m (asile to ceiling)
- Width (maximum) 1.50m



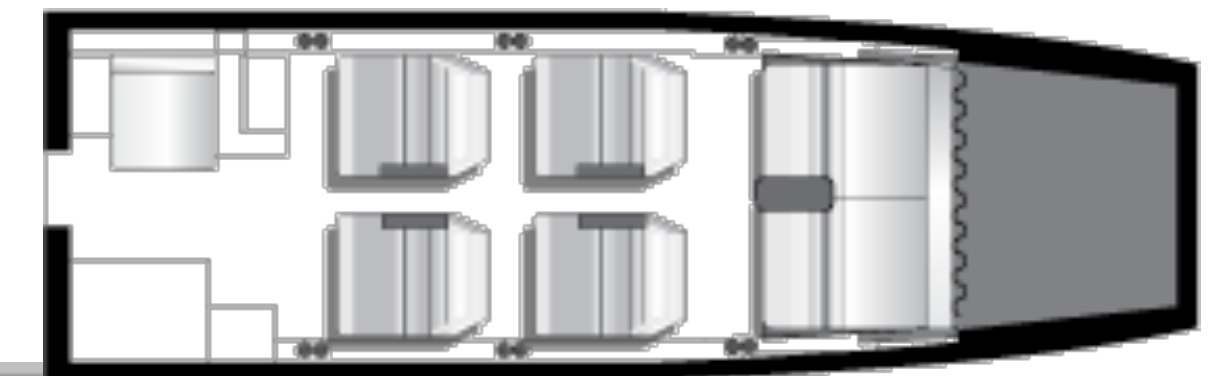
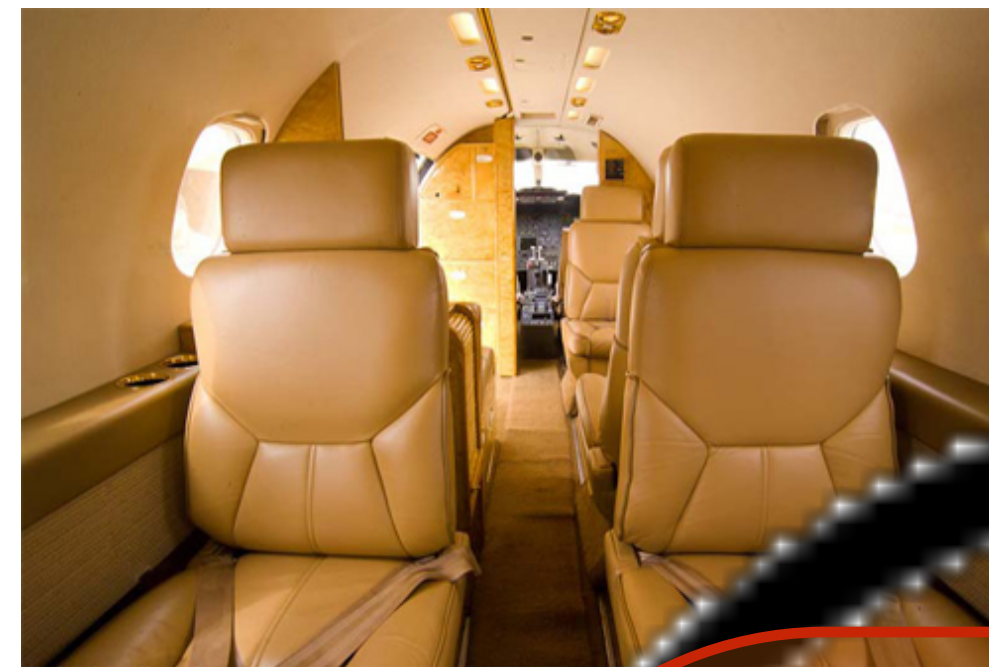
Same Interior Dimensions

- Frontal Area - about the same.
- Head Clearance - better with rectangular cross section.
- Rectangular Frontal Area - constrained by aisle height dimension.

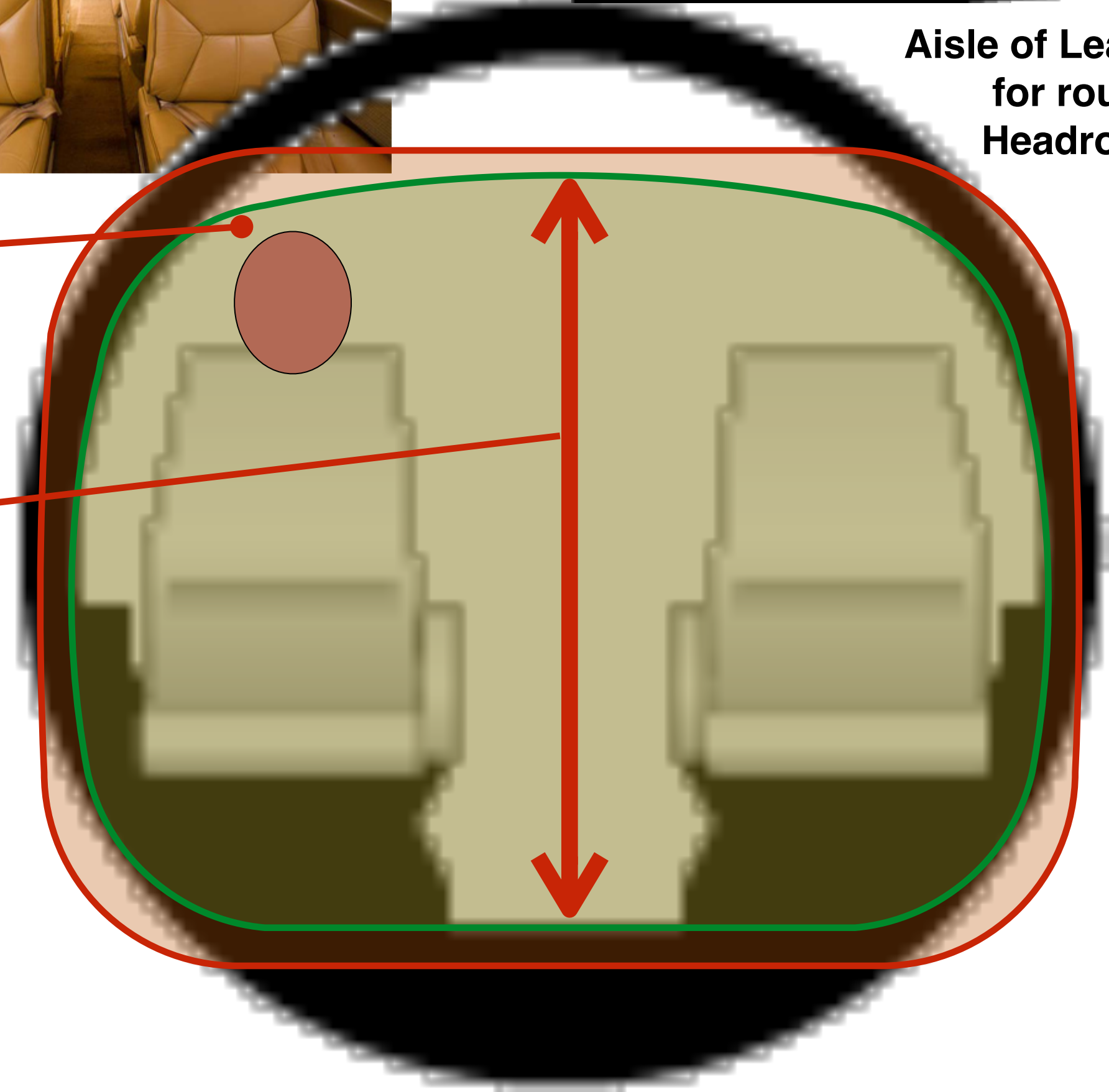


Reduce Headroom

- Frontal Area - is now much less.
- Head Clearance is tight, but Hyperloop seats will be reclined.
- Headroom can be reduced if aisle is for emergency egress.

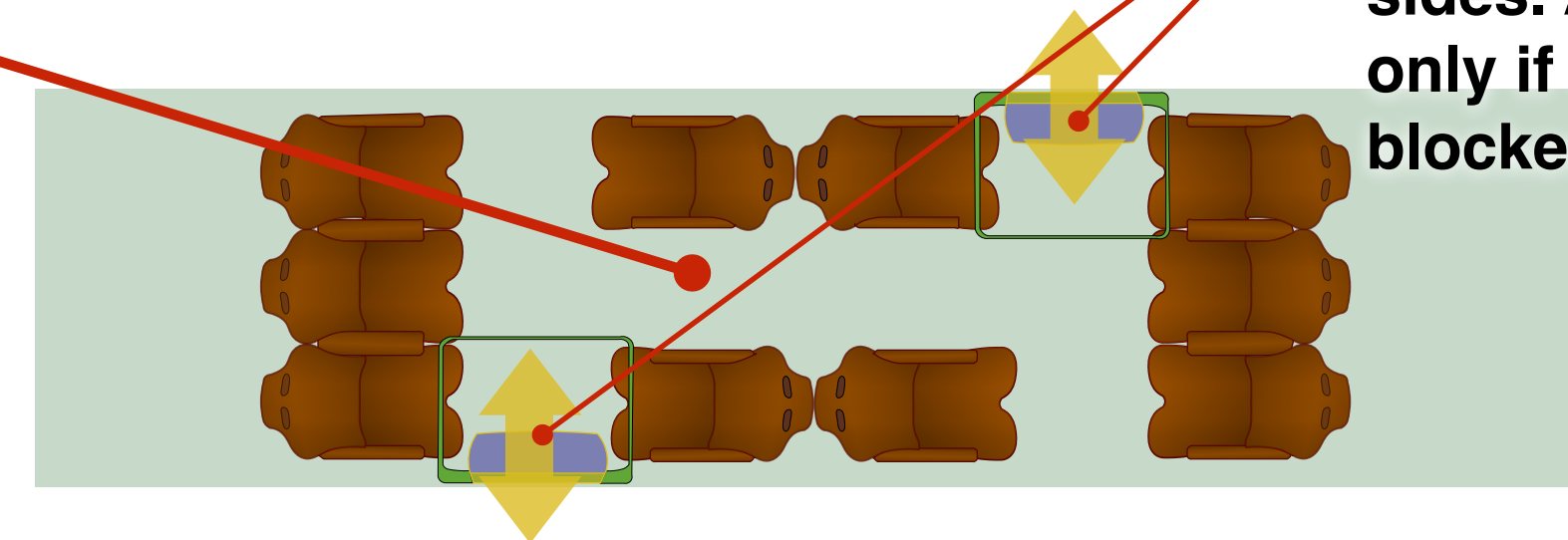
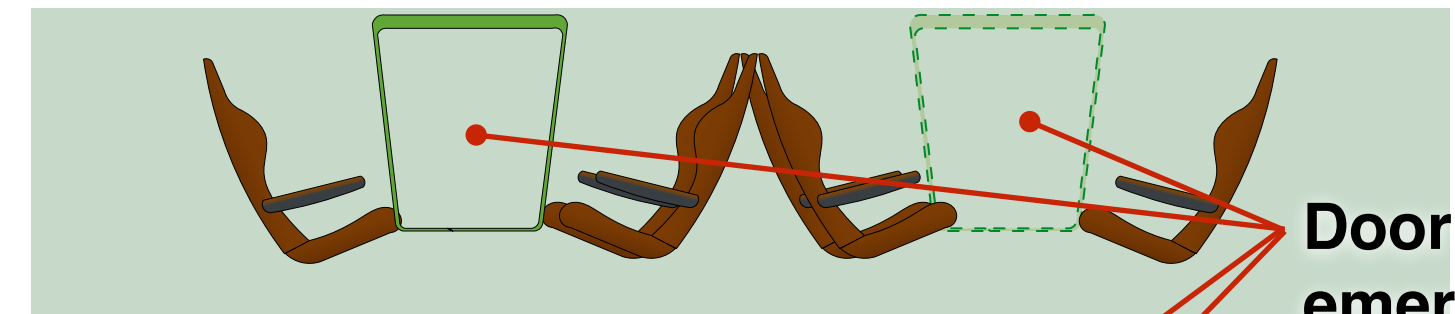
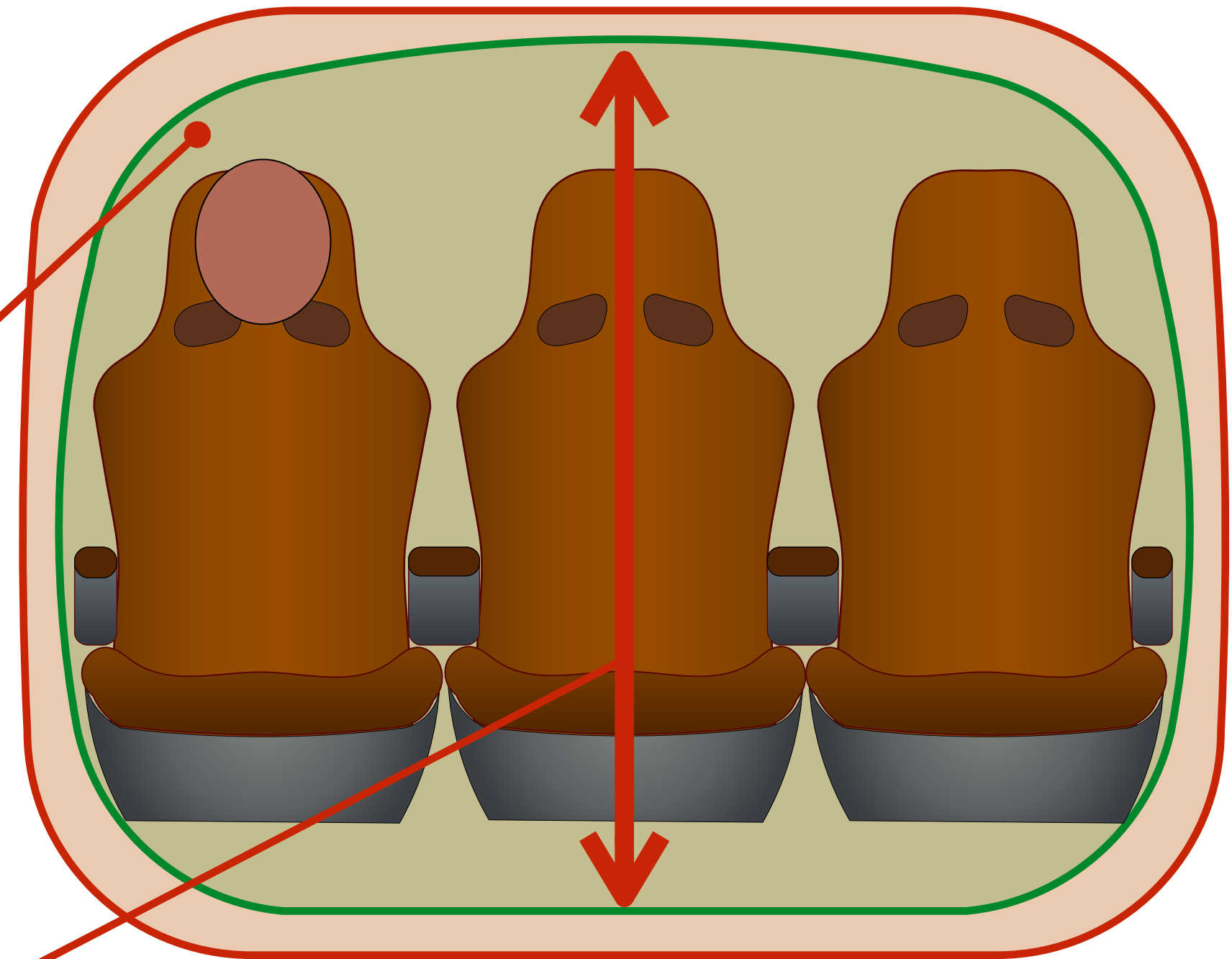


**Aisle of Lear 25 is used
for routine access.
Headroom matters!**



Cheap Seats

- Narrow “economy class” seats allow three across seating.
- Frontal Area - less than circular alternative.
- Head Clearance - better than Lear 25 with seats reclined.
- If aisle is used for emergency exit, the headroom can be reduced,



Door for normal and emergency use on both sides. Aisle is needed only if one door is blocked in an emergency.

Conclusion?

For this one design case, a rectangular cross section offers some advantage.
Different seating configurations, presence or absence of an aisle, number and arrangement of doors will all effect the choice of Capsule cross section.

It is important to understand the ADA requirements and passenger physical / psychological constraints as early in the design process as possible.